

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007621**Date Inspected:** 17-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG and Tower Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Bo Zhan, Mr. Liu Fa Wein

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Prior to Caltrans QA Inspectors' concurring with issuance of OBG deck plate closed rib green tag releases a review of the ultrasonic inspection database is performed to verify all closed rib tack weld repair locations have been ultrasonically accepted. Today this QA Inspector, Mr. Paul Dawson, performed data entry of ultrasonic inspection information from the field generated Ultrasonic inspection data sheets onto the common drive computer database for the following OBG deck panels: DP154-001, DP155-001 and DP263-001.

## Tower Bay 11

ZPMC issued "Inspection Notification Sheet" #3459 informing QA that ZPMC has completed ultrasonic inspections of welds WSD1-FBSA4-2A/C-38 and WSD1-FBSA4-2A/C-39. ZPMC ultrasonic Inspectors had previously accepted these welds. This QA Inspector performed random ultrasonic inspections of the two welds and items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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ZPMC issued "Inspection Notification Sheet" #3459 informing QA that ZPMC has completed ultrasonic inspections of welds ESD1-FCSA4-2A/C-13 and ESD1-FCSA4-2A/C-15. This QA Inspector performed a search of tower bay 11 and these two welds could not be located. The QA Inspector requested assistance from ABF representative Mr. Lou Lia Quan who after consulting with others, Mr. Lou Lia Quan informed this QA Inspector that these weld numbers do not exist and the "NDT Inspection Notification Sheet" that was issued by ZPMC appears to be incorrect.

The QA Inspector observed ZPMC welder Mr. Guo Xian Wei, stencil 255865 is using shielded metal arc procedure WPS-B-P-2312-TC-P5 to tack weld WSD1-FBSA2A/C-30B. This QA Inspector observed a welding current of approximately 140 amps and the base material where the weld is being made had been preheated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

The QA Inspector observed ZPMC welder Mr. Zhu Xuexin, stencil 053310 is using shielded metal arc procedure WPS-B-P-2312-TC-P5 to tack weld WSD1-FBSA2A/C-24B. This QA Inspector observed a welding current of approximately 270 amps and the base material where the weld is being made had been preheated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

See above.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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